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(71) Applicant *(for all designated States except US)*: **THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY** [US/US]; 1705 El Camino Real, Palo Alto, California 94306-1106 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **OMARY, M. Bishr** [—/US]; Palo Alto VA Medical Center, Mail Code 154J, 3801 Miranda Avenue, Palo Alto, CA 94304 (US). **KU, Nam-On** [—/US]; Palo Alto, CA (US).

(74) Agent: **SHERWOOD, Pamela, J.**; Bozicevic, Field & Francis LLP, 1900 University Avenue, Suite 200, East Palo Alto, CA 94303 (US).

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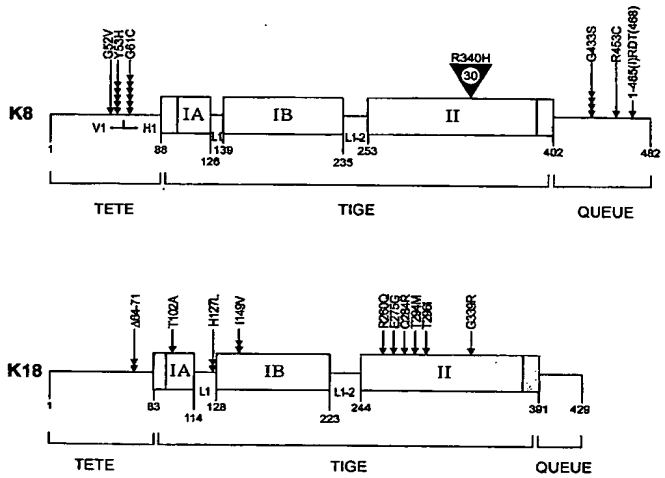
(54) Title: KERATIN 8 AND 18 MUTATIONS ARE RISK FACTORS FOR DEVELOPING LIVER DISEASE OF MULTIPLE ETIOLOGIES



(57) Abstract: Keratin 8 and 18 (K8/K18) mutations are shown to be associated with a predisposition to liver or biliary tract disease, particularly noncryptogenic hepatobiliary disease. Unique K8/K18 mutations are shown in patients with diseases including but without limitation to viral hepatitis, biliary atresia, alcoholic cirrhosis and other acute or chronic toxic liver injury, cryptogenic cirrhosis, acute fulminant hepatitis, autoimmune liver disease, cystic fibrosis, primary biliary cirrhosis, primary sclerosing cholangitis, diseases that are linked with cryptogenic cirrhosis, such as nonalcoholic steatohepatitis, and the like. Livers with keratin mutations had increased incidence of cytoplasmic filamentous deposits. Therefore, K8/K18 are susceptibility genes for developing cryptogenic and noncryptogenic forms of liver disease. Mutant alleles are associated with disease susceptibility, and their detection is used in the diagnosis of a predisposition to these conditions.

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